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Reach for Your Dream

Astronaut Franklin Chang-Diaz

by Christine Economos



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In 1957, Franklin Chang-Diaz was a seven-year-old boy from the country of Costa Rica. That year, Franklin visited the country of Venezuela. One night he watched the sky. He and people all over the world had heard the news. A satellite had been sent into space from Earth. Scientists in a faraway country called the Soviet Union had made a small satellite called *Sputnik.* Many people watched the night sky. They wanted to see little Sputnik fly overhead like a moving star.

satellite: an object in space, going around a larger object, such as the Earth

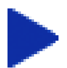




Soon the United States sent satellites into space. The race to explore space had begun.

In Costa Rica, Franklin Chang-Diaz thought that some day people would explore space. He wanted to become a space explorer. He was a young boy at that time, and no one had traveled in space yet. But Franklin thought about the future. His dream of traveling in space began.

As the years went by, the United States and the Soviet Union did launch people into space. Astronauts rode in spacecraft that would burst from launching pads in Florida. The astronauts circled the Earth. Franklin dreamed of becoming an astronaut.




Costa Rica is a country in Central America.


Who was this boy from Central America who would become a United States astronaut?

Franklin Chang-Diaz was born on April 5, 1950, in San José, Costa Rica.

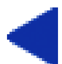
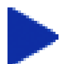
He completed his school education at De La Salle High School in San José. He worked very hard and got good grades. He graduated from high school in 1967.




San José, the capital city of Costa Rica


Franklin still dreamed of becoming an astronaut. He knew he would have to leave Costa Rica if he wanted to reach his goal. Costa Rica did not have a space program.

Franklin wanted to study in the United States. He worked in a bank for a year to save enough money to buy a plane ticket. When he got to the United States, he lived with relatives in the state of Connecticut.




After high school, Franklin continued his studies at the University of Connecticut.


Franklin did not speak English very well. To improve his English, he decided to repeat his senior year of high school in Connecticut. At first, he did not do well in his classes. But by the end of the year, he graduated near the top of his class.

Franklin applied to the University of Connecticut. He was accepted at the university, and he was given a scholarship too. Letters from his high school teachers helped him get a scholarship.

scholarship: money given to a student to pay for schooling




At the university, Franklin studied mechanical engineering. He knew he would have to work long and hard to become an astronaut. He decided to write to NASA. He wanted to know what kind of skills a person would need to become a NASA astronaut.

Franklin was not happy with the reply he got from NASA. The answer said that only United States citizens could work for NASA.

Did You Know? **NASA**

NASA is a short name for the National Aeronautics and Space Administration. It is the government agency that directs the space program in the United States.

mechanical engineering: the science of planning and building machines





July 20, 1969, was a big day around the world. Franklin Chang-Diaz and hundreds of other students crowded around a television set. They were watching the *Apollo 11* mission. This space mission would land an astronaut on the Moon.

The students held their breath as they watched a small ship called the *Eagle* touch down on the surface of the Moon.

It was a big moment for Franklin. At that moment he thought, *That's what I came to this country to do.*





Apollo 11 was the name of the first space mission to land a human on the Moon.





Towering NASA rockets of various shapes and sizes



Franklin studied physics and rockets because he believed that future astronauts would be scientists who could conduct experiments in space. He graduated in 1977.

After he became a United States citizen, Franklin applied to NASA to be an astronaut. There was a lot of competition. Over 4,000 people applied for just nineteen astronaut jobs!

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experiments: scientific tests to learn things

competition: people trying hard to gain something that others want



In May, 1980, Franklin was accepted into the astronaut program. He was the first Hispanic astronaut chosen by NASA.

"When I heard the good news," said Franklin, "I called my father in San José to tell him."

Astronaut training takes many years. Franklin worked hard. Then, almost thirty years after Franklin had looked up at *Sputnik*, his dream came true. On January 12, 1986, Franklin went into space aboard the Space Shuttle *Columbia*. During the six-day flight, Franklin helped launch a satellite. He also did experiments.





Franklin (bottom, center) and the crew of the first Russian-American Spacelab mission





Sometimes astronauts must fix things outside the space ship. They are attached to the ship by a strong belt.



Since 1986, Franklin has taken six more trips into space. In space he has observed Halley's Comet up close. On the 2002 *Endeavour* mission, Franklin took three space walks as he helped install a robotic arm on a satellite.

On Earth, Dr. Franklin Chang-Diaz works in the Advanced Space Propulsion Laboratory at NASA. He and his team are designing a motor that will allow astronauts to travel further and faster in space.

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comet: a body of ice and dirt flying in space

space walks: movements of an astronaut outside the space ship in space








Dr. Franklin Chang-Diaz in his space suit.



To the people of Costa Rica, Dr. Franklin Chang-Diaz is a national hero. He is the first Costa Rican to go into space. He is also a successful scientist.

Franklin often goes back to Costa Rica. There he visits schools and talks to school children. He tells them to work hard and never give up. That way they will be able to reach their dreams too.





Talk About It

1. Name two things that Franklin Chang-Diaz did to achieve his dream of becoming an astronaut.
2. Do you think it would be difficult to become an astronaut? Why or why not?

Write About It

3. On a separate sheet of paper, write about a wish or dream that you have for your life. Tell about your plans for reaching that dream.

Extend Language

The word part *astro* comes from a Greek word that means "star." *Naut* comes from a Greek word that means "sailor." Why were these word parts used to make the word *astronaut*?

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